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(54) Title: DNA DOSAGE FORMS

(57) Abstract: The present invention relates to efficient devices for administration of DNA based pharmaceutical agents into mammalian skin. In a particularly preferred aspect of the present invention there is provided devices for administration of DNA vaccines into the skin of the mammal, and preferably into human skin. The present invention provides a microneedle DNA pharmaceutical agent delivery device having at least one skin-piercing element which comprises a support member coated with a solid reservoir medium containing, in solid solution or suspension within it, the DNA pharmaceutical agent, and a stabilising agent that inhibits the degradative effects of free radicals. Preferably the solid pharmaceutical reservoir medium coated onto such devices is a polyol, preferably being a polyol in an amorphous state (such as a glass).

INTERNATIONAL SEARCH REPORT

Int. Appl. No.

PCT/GB 03/0282

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K9/70 C12N15/89 A61M37/00 A61B17/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K C12N A61M A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 96 13277 A (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA) 9 May 1996 (1996-05-09) page 1, line 16 - line 20 page 31, line 13 - line 14 page 37, line 12 - line 16 page 57 -page 58; example 5 page 75; claim 19	1-27
A	WO 97 40839 A (MERCK & CO., INC.) 6 November 1997 (1997-11-06) cited in the application claims 1-43	1-27
A	EP 1 138 337 A (QUADRANT HOLDINGS CAMBRIDGE) 4 October 2001 (2001-10-04) claims 1-3,20,27,28	1-27



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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